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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,974	07/09/2003	Frederick E. Shelton IV	END909.0511036	1303
7590 06/25/2004			EXAMINER	
FROST BROWN TODD LLC			DURAND, PAUL R	
2200 PNC Center			ART UNIT	
201 E. Fifth Street			PAPER NUMBER	
Cincinnati, OH 45202-4182			3721	

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/615,974	Applicant(s) SHELTON ET AL.	
	Examiner Paul Durand	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/03 and 04/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear to the examiner what new limitation is being claimed in that it is unknown how the anvil forms an inwardly biased relation to the elongate channel.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-3 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al (US 6,619,529) in view of Bishop et al (US 5,662,662).

In regard to claim 1,6 and 11, Green discloses the invention substantially as claimed including a surgical instrument comprised of handle 62 of a handle portion generally indicated by the housing 52, shaft 54, which transfers the articulation and firing motions, end effector, comprised of anvil 56 and cartridge section 58 which

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contains cutting channel, and a firing mechanism, which runs through the articulation mechanism and the end effector comprised of cam bars 286, 288 and cutter 240, with sloped cam sections 290, that have a first thickness in a vertical direction which is different than the leg portion (see Figs. 1,21-24, C7,L1-32 and C11 L32-67). What Green does not disclose is a firing mechanism that varies in thickness transversely or horizontally. However, Bishop teaches that it is old and well known in the art of surgical tools to provide an articulated tool with a shaft 84, that contains an actuation device comprised, which passes through the articulation mechanism, and is comprised of cable 196 having a section that is smaller than a driver 312 for the purpose of providing a larger surface area to drive the staple (see Figs. 1,16,17, C12,L16-28 and C19,L37-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Green with the staple actuation device as taught by Bishop for the purpose of providing a larger surface area to drive the staple.

In regard to claim 2, Green discloses the invention substantially as claimed including pivoted end effector comprised of anvil 56, cartridge section 58, with the actuation portion containing cutter 240 (see Figs.22-24 and C11,L32-55).

In regard to claims 3,8 and 9, Green discloses the invention substantially as claimed including channel 274 coupled to the handle portion through shaft 54, for receiving a staple cartridge, wedges in the form of cam members 290 for driving the staples, anvil 56, cutting member 240, which travels in channel 282 and leg portion of

cam bars 286 and 288, which function as middle members to move the cam members 290 (see Fig. 1 and C12,L1-46).

In regard to claims 7 and 10, Green discloses the invention substantially as claimed including spacing the anvil from the elongate channel during operation (see Figs. 16,17 and C13,L10-36).

In regard to claims 12 and 13, Green discloses the invention substantially as claimed including a handle or body portion with means to separately transfer motion through shaft 182 for articulation through cable 442 and pulley 440, and for actuation through member 192, which attaches to cam bars 286 and 288 (see Figs. 15,16,20-22, C13,L24-32 and C15,L1-22).

5. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al in view of Bishop et al as applied to claims 1-3 and in further view of Bolanos et al (US 5,575,799).

The modified invention of Green discloses the invention substantially as claimed except for the use of gears to articulate the end effector. However, Bolanos teaches that it is old and well known in the art of surgical tools to provide a hollow shaft 103, containing gear 36, that converts the rotational motion from the body or handle portion 111 to articulated motion for the end effector 107 for the purpose of efficiently moving a tool in a confined area (see Figs. 1-3, C3,L44 – C4,L41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the modified invention of Green with the articulation means as taught by Bolanos for the purpose of efficiently moving a tool in a confined area.

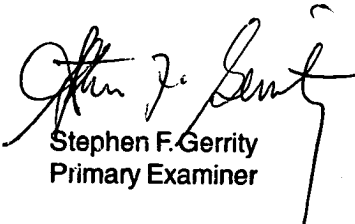
Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gieste et al, Heaton et al, Jones et al, Huitema et al and Oberlin et al have been cited to show devices having similar structure.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 703-305-4962. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Durand
June 18, 2004


Stephen F. Gerrity
Primary Examiner